

backing to the edge of the nest where she raised her wings threateningly and uttered the creaking note in a frightened tone. The turtle soon disappeared but she remained at the side of the nest creaking softly for several minutes, then peering ahead she cautiously settled down to brood.

Next day I found the nest all mussed up with three of the eggs remaining in it and two more in the water on one side. I was in the blind nearly an hour and although I heard Gallinules near several times none came to the nest.

On examination the nest appeared to have become water soaked one side disintegrating so that the weight of the Gallinule had caused it to sink and spill the eggs. Or perhaps a turtle had tried to climb upon the nest. However this does not seem probable as the eggs had not been destroyed.

Incubation was almost complete in some of the eggs and there would have been young in the nest inside of two days and I had hoped to be in the blind at this interesting time.



NOTES ON NORTH AMERICAN BIRDS.

II.

BY HARRY C. OBERHOLSER.

LIKE the first installment¹ the present paper is made up of various notes on North American birds. A few of the birds treated below belong to species or genera which are much in need of revision, and the notes on such have been withheld for years in the expectation that time and opportunity would avail for thorough study of these groups. But since this does not appear possible in the near future, these comments are now presented in this form in the hope that they may be of at least some assistance to ornithologists.

¹ For the first paper of this series see 'The Auk,' XXXIV, April, 1917, pp. 191-196.

***Vireo bellii arizonæ* Ridgway.**

The Arizona form of *Vireo bellii* was originally characterized by Mr. Ridgway in 1903¹ from a type collected at Tucson, Arizona. It has commonly been considered as inseparable from *Vireo bellii pusillus* Coues, but by a study of our Texas and other material, some of this additional to that available to Mr. Ridgway, the race is shown to be readily distinguishable from both *Vireo bellii pusillus* of California as well as from *Vireo bellii medius* of central western Texas. It differs from the former in having the upper parts decidedly more greenish (less grayish), and the lower parts less whitish, the sides and flanks much more strongly tinged with olive grayish and more washed with yellowish. The wing and tail average somewhat shorter, but these differences are not of much value in identifying specimens. From *Vireo bellii medius* Oberholser it may readily be distinguished by its decidedly longer tail and much paler and more grayish coloration, both above and below.

The geographic distribution of *Vireo bellii arizonæ* extends from the extreme western portion of central western Texas west to southern Arizona, and south to the Mexican states of Sonora, Sinaloa, and Chihuahua.

***Bæolophus inornatus murinus* Ridgway.**

This race of *Bæolophus inornatus* was first made known by Mr. Ridgway in the Proceedings of the Biological Society of Washington, Volume XVI, June 25, 1903, page 109, as *Bæolophus inornatus murinus*, from a specimen taken in the Nachoguerro Valley, northern Lower California. It was later more fully described by him²; it was also recognized some years later by Dr. Joseph Grinnell and Mr. H. S. Swarth;³ and subsequently, though without comment, by Doctor Grinnell in Pacific Coast Avifauna No. 11, 1915, p. 163; but it seems to have been otherwise generally ignored by ornitho-

¹ *Vireo bellii arizonæ* Ridgway, Proc. Biol. Soc. Washington, XVI, September 30, 1903, p. 108.

² Bull. U. S. Nat. Mus., No. 50, part III, 1904, pp. 389-390.

³ Univ. Calif. Publ. Zool., X, No. 10, October 13, 1913, p. 310.

logical writers. Examination of the material available shows that it is, however, a recognizable subspecies, differing from *Bæolophus inornatus inornatus* in its more grayish coloration and additionally in its darker under parts; and from *Bæolophus inornatus griseus* in its decidedly darker color. It ranges in the Pacific coast region from northern Lower California north through southern California to Santa Barbara County.

Bæolophus wollweberi annexus (Cassin).

The existence of two forms of *Bæolophus wollweberi* (Bonaparte) was first noticed by Mr. Ridgway.¹ His distinction has subsequently been ignored and the entire species included under one form. That there are, however, two readily distinguishable races is evident on comparison of specimens from Arizona with those from central and southern Mexico. The northern race differs from the southern in its decidedly paler coloration both above and below.

This species was originally described as *Lophophanes wollweberi* from Zacatecas, Mexico, by Bonaparte.² Birds examined from Huasamota, Durango, which is considerably north of Zacatecas, prove to be almost identical with those from southern Mexico, though verging slightly toward the northern race; consequently the specific name *wollweberi* must apply to the southern bird, which, therefore, becomes the typical race. A name for the northern bird is, as already shown by Mr. Ridgway, found in *Parus annexus* Cassin,³ described from a specimen purporting to be from the Rio Grande in Texas. As, however, the species is not known to occur in Texas, this locality is probably erroneous; but the applicability of the name is undoubted, since the type, which has been examined, proves to be identical with birds from Arizona. The northern race of the species must, therefore, stand as *Bæolophus wollweberi annexus* (Cassin). Its geographic distribution is as follows:

¹ Bull. U. S. Nat. Mus., No. 50, part III, 1904, p. 393.

² Comptes Rendus Acad. Sci., XXXI, October, 1850, p. 478.

³ Proc. Acad. Nat. Sci. Phila., V, October, 1850, p. 103, pl. I.

Mountains of northwestern Mexico and contiguous portion of the southwestern United States; north to southwestern New Mexico and southern Arizona; west to Sonora; south to Sonora and Chihuahua; and east to Chihuahua and southwestern New Mexico.

The range of *Bæolophus wollweberi wollweberi* is consequently restricted to the mountains of central and southern Mexico, north to Zacatecas and Durango, and south to Vera Cruz, Puebla, and Oaxaca.

***Geothlypis trichas brachidactyla* (Swainson).**

This race of *Geothlypis trichas* was first properly distinguished by Mr. William Palmer,¹ although the *Trichas brachidactylus* of Swainson,² based on birds from the northern provinces of the United States, is its earliest name. It has in recent years been generally discredited, possibly on account of the difficulty in distinguishing worn specimens; but with the proper material from typical sources, it may be easily recognized. It differs from *Geothlypis trichas trichas* in its larger size, and, in the male, by reason of its more greenish upper surface, more whitish frontal band of gray, more extensively yellow posterior lower parts, and its usually more brownish flanks. The female is similar to that of *Geothlypis trichas trichas* but is larger, more greenish above, and slightly paler.

The geographic range of *Geothlypis trichas brachidactyla* includes the northeastern United States and southeastern Canada; the bird breeding north to Newfoundland, central Quebec, northern Ontario, northern Minnesota, and northeastern North Dakota; west to central North Dakota and central Nebraska; south to northeastern Kansas, southern Illinois, southern Indiana, Ohio, northern Pennsylvania, and northern New Jersey; and east to the Atlantic coast from northern New Jersey to Nova Scotia and Newfoundland. It winters south to the Bahama Islands, Cuba, Jamaica, Swan Island in the Caribbean Sea, Costa Rica, Nicaragua, Guatemala, southern and eastern Mexico.

¹ Auk, XVII, July, 1900, pp. 221, 226-228.

² Anim. in Menag., 1838, p. 295.

***Dendroica caerulescens cairnsi* Coues.**

The status of this race has recently been questioned by Mr. C. W. G. Eifrig¹ on account of two intermediate male specimens collected in the Allegheny Mountains of western Maryland; and on this basis it is proposed to eliminate the form from the North American list.²

Examination, however, of a large series of birds of this species representing both *Dendroica caerulescens caerulescens* and *Dendroica caerulescens cairnsi* indicate that the two current races are clearly recognizable. While it is true that the amount of black on the back of the male varies considerably in both forms and that males from New York and New England occasionally have much black on the interscapulum, it is also true that the southern birds have on the average a much greater amount of black and are almost never entirely without these black markings. There are, however, other characters in the male which serve to separate *Dendroica caerulescens cairnsi* from *Dendroica caerulescens caerulescens*, such as the darker shade of the bluish ground color of the upper parts, especially the pileum, which also is sometimes streaked with black. The female of *Dendroica caerulescens cairnsi* is even more easily distinguished than is the male, for it is darker and duller above as well as less yellowish on the lower parts, and has the olivaceous color of the flanks darker and more strongly contrasted with the pale dull yellowish of the middle of the abdomen. In characterizing this southern race of the Black-throated Blue Warbler altogether too much emphasis has heretofore been placed on the amount of black on the back of the male, for the subspecies, as above indicated, would not fall with this character alone, since the coloration of females is undoubtedly the best diagnostic character. In fact, *Dendroica caerulescens cairnsi* is a perfectly recognizable race and deserves retention in our list.

Mr. Eifrig, in the communication above mentioned, has intimated that the breeding form of this species in the mountains of western Maryland is the northern race, *Dendroica caerulescens*

¹ Auk, XXXII, January, 1915, p. 110.

² Cf. Stone, Auk, XXXIII, October, 1916, p. 431.

cærulescens, basing this statement on two adult males which seem to be nearer that form. In this region, which is the transition ground between many northern and southern races, particularly those of the Allegheny Mountains, we should expect to find specimens that would give more or less trouble in their identification, and this is true not only in the particular species under consideration but in several others. There are in the Biological Survey collection 9 adult specimens of the Black-throated Blue Warbler from the mountains of western Maryland, taken at Finzel, Bittinger, and Kearney. This series includes both males and females, and while some of the specimens incline strongly toward *Dendroica cærulescens cærulescens*, and all of them are more or less intermediate, the series as a whole shows that the breeding form of this region is *Dendroica cærulescens cairnsi*.

***Vermivora celata orestera* Oberholser.**

The Rocky Mountain form of *Vermivora celata* was originally described¹ from Willis in northern New Mexico. Most subsequent authors, doubtless from lack of sufficient material, have failed to recognize its distinctness. Additional material from various parts of its range, examined since the original description was published, fully substantiates the characters of the race as they were given. It is readily distinguishable from *Vermivora celata celata* by its larger size and much more yellowish coloration both above and below; and from *Vermivora celata lutescens* by its much greater dimensions and by the duller, less yellowish color of both upper and lower parts. Thus, while *Vermivora celata orestera* is intermediate in the character of its coloration between *Vermivora celata celata* and *Vermivora celata lutescens*, it is not so in size, for it is larger than either. It occupies much the same relation to the eastern and western races of its species as does *Wilsonia pusilla pileolata* to *Wilsonia pusilla pusilla* and *Wilsonia pusilla chryscola*. Detailed measurements of this and the other forms of *Vermivora celata* may be found in the present writer's previous paper on the subject.²

¹ *Vermivora celata orestera* Oberholser, Auk, XXII, July, 1905, p. 243.

² Auk, XXII, April, 1905, pp. 246-247.

The geographic distribution of *Vermivora celata orestera* is as follows:

Western United States, southwestern Canada, central and northern Mexico. Breeds north to southern Alberta and southern British Columbia; west to eastern Washington, eastern Oregon, and eastern California; south to southeastern California, southern Arizona, and central New Mexico; east to New Mexico, Colorado, Wyoming, and Montana. Winters south to the Mexican states of Tamaulipas, Puebla, Morelos, Guerrero, Michoacan, Jalisco, and southern Lower California. Migrates east to Minnesota and casually to Pennsylvania.

***Molothrus ater artemisiæ* Grinnell.**

The northwestern form of *Molothrus ater* was described by Dr. Joseph Grinnell as *Molothrus ater artemisiæ*¹ from the Quinn River Crossing in Humboldt County, Nevada. Five days later appeared the description of *Molothrus ater dwighti* by Dr. Louis B. Bishop,² based on specimens from Crane Lake, Saskatchewan, Canada. These two birds are undoubtedly the same, and of course the former name has priority. This race has since been generally ignored, but examination of a large amount of material shows that it is nearly as well characterized as *Molothrus ater obscurus*. It is even larger than *Molothrus ater ater*, as may be seen by consulting the detailed measurements given by Dr. Bishop,³ and has a longer and relatively slenderer bill, the outline of the culmen being not so convex. The female is similar to the same sex of *Molothrus ater obscurus*, but is paler, more brownish, with a usually more whitish throat. With *Molothrus ater obscurus* it scarcely needs comparison, as it is in every respect so much larger.

The geographic ranges of the three forms of *Molothrus ater*, after the revision now necessary by the recognition of an additional subspecies, are as follows:

Molothrus ater ater.—Eastern North America: breeds north to New Brunswick, Quebec, and Ontario; west to Minnesota, Iowa,

¹ Univ. Calif. Publ. Zool., V, No. 5, December 31, 1909, p. 276.

² Auk, XXVII, No. 1, January 4, 1910, p. 61.

³ Auk, XXVII, No. 1, January 4, 1910, pp. 61-62.

southeastern Montana, eastern Wyoming, Colorado, and New Mexico; south to southern New Mexico, central western and central Texas, Louisiana, and North Carolina; east to the Atlantic coast from North Carolina to New Brunswick; and winters south to the Gulf coast of the United States and the Mexican states of Tamaulipas, Yucatan, Zacatecas, Michoacan, and Sinaloa.

Molothrus ater artemisiae.—Western United States and western Canada: breeds north to southern Keewatin and southern Mackenzie; west to Alberta, Oregon, and California; south to south central California, Nevada, central Utah, southwestern Wyoming, southwestern Montana, and central Montana; east to eastern North Dakota and Manitoba; and winters south to southern Texas and the Mexican states of Vera Cruz, Michoacan, Tepic, and southern Lower California. Casual east to Fort Snelling, Minnesota.

Molothrus ater obscurus.—Mexico and the southwestern border of the United States: breeds north to southern Louisiana, southern Texas, central Arizona, and southern California, south to Tamaulipas, Oaxaca, Colima, Sinaloa, and southern Lower California.

***Loxia curvirostra bendirei* Ridgway.**

This crossbill was first described by Mr. Ridgway from Fort Klamath, Oregon.¹ Although Mr. Ridgway has since consistently recognized it, and in his "Birds of North and Middle America" has set forth its characters in detail with tables of measurements,² it has been generally discredited. A recent careful examination of all material available shows, however, that this race is well deserving of recognition, although, as often happens in closely allied subspecies, the characters are largely average distinctions. It differs from *Loxia curvirostra minor* in decidedly larger size and rather paler colors; and occupies, moreover, a definite and very extensive range in the western United States. From *Loxia curvirostra stricklandi* it differs in being decidedly smaller. While it thus is intermediate between *Loxia curvirostra minor* and *Loxia*

¹ *Loxia curvirostra bendirei* Ridgway, Proc. Biol. Soc. Wash., II, April 28, 1884, p. 101.

² Bull. U. S. Nat. Mus., No. 50, part I, 1901, p. 50.

curvirostra stricklandi, and some of its specimens are troublesome to distinguish with certainty, most individuals are without difficulty determinable. In view of these facts it seems desirable to recognize *Loxia curvirostra bendirei* as an additional race. Detailed measurements of all three American forms of this species can be found in Mr. Ridgway's "Birds of North and Middle America."¹ The geographic distribution of *Loxia curvirostra bendirei* as now made out is as follows:

Breeds in the mountains of the western United States, north to Wyoming and Montana; west to Oregon and California; south to southern California and northern New Mexico; and east to Colorado. Migrates east to eastern Nebraska, Kansas, and central Texas; west to the coast of southern California; and casually to Guadalupe Island, Lower California.

Passer hostilis Kleinschmidt.

The British form of *Passer domesticus*, with which the birds from the United States are identical, was recently described by Kleinschmidt as *Passer hostilis*.² Notwithstanding the fact that Kleinschmidt used a binomial designation he really intended to describe the British bird as a subspecies of the typical continental form, as may readily be seen by consulting his remarks. Furthermore, the difference between the two forms is not a constant one, being merely a matter of the average smaller size of the British bird. The proper designation of the British and consequently the North American bird is, therefore, *Passer domesticus hostilis*. In view of this recent development, the name "English" Sparrow, by which this bird is commonly known in the United States, is not such a misnomer after all.

¹ Bull. U. S. Nat. Mus., No. 50, part I, 1901, pp. 47-52.

² Falco. XI, No. 2, December, 1915, p. 19 (type locality, Tring, England).